

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 16

**UNITED STATES PATENT AND TRADEMARK OFFICE**

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

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Ex parte PATRICK A. BANAS

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Appeal No. 2003-1531  
Application No. 09/772,274

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ON BRIEF

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Before STAAB, CRAWFORD, and BARRY, Administrative Patent Judges.  
CRAWFORD, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 19 to 24. Claims 1 to 14 have been canceled. Claims 15 to 18 have been found allowable.

The appellant's invention relates to a method for alerting a drowsy driver by lowering the temperature in the vehicle cab or pumping oxygen into the vehicle cab when it is determined that the driver is drowsy (specification, pages 1 and 4 to 5). A copy of the claims under appeal is set forth in the appendix to the appellant's brief.

The prior art

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Kawakami et al. (Kawakami)	5,488,353	Jan. 30, 1996
Saitoh et al. (Saitoh)	5,813,989	Sep. 29, 1998
Brownlee	5,910,773	Jun. 8, 1999

The rejections

Claims 19 to 21 stand rejected under 35 U.S.C. § 103 as being unpatentable over Kawakami in view of Saitoh.

Claims 22 to 24 stand rejected under 35 U.S.C. § 103 as being unpatentable over Kawakami in view of Brownlee.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejections, we make reference to the answer (Paper No. 11, mailed Jul. 30, 2002) for the examiner's complete reasoning in support of the rejections, and to the brief (Paper No. 10, filed May 21, 2002) and reply brief (Paper No. 12, filed Aug. 29, 2002) for the appellant's arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the applied prior art references, and to the respective positions articulated by the appellant and the examiner. As a consequence of our review, we make the determinations which follow.

We turn first to the examiner's rejection under 35 U.S.C. § 103 of claims 19 to 21 under 35 U.S.C. § 103 as being unpatentable over Kawakami in view of Saitoh. It is the examiner's view that Kawakami discloses an apparatus and method for alerting a drowsy driver which comprises a tactile warning, a visual warning, and an auditory warning in connection with a determination that the driver is drowsy. The examiner finds that Kawakami fails to disclose lowering a temperature in a vehicle cab in response to an increase in the level of drowsiness. The examiner relies on Saitoh for the disclosure of a driving mental condition detecting apparatus which includes an air conditioner system for lowering the temperature in the vehicle cab in response to the determination of an increase in the level of drowsiness of the driver. The examiner concludes:

[I]t would have been obvious to one of ordinary skill in the art to implement the technique of Saitoh et al. in the system of Kawakami et al. for lowering a temperature in the interior space of a vehicle in order to alert the driver who is determined to be unaware . . . . [Answer at page 3.]

Appellant argues:

Kawakami does not awaken the driver by altering conditions in the vehicle passenger compartment, but rather only produces a terminable warning that requires a reaction from the driver. If the cooling system of Saitho [sic, Saitoh] was employed in Kawakami, the cool air would not provide a terminable warning that requires a reaction by the driver, but would rather only cool the passenger compartment to alter vehicle conditions. The driver would not be alerted of his sleepiness and would not perform any action to terminate the flow of cool air. [Brief at page 4.]

The goal of the Kawakami invention is to improve the awareness of vehicle drivers (col. 1, lines 8 to 10). Kawakami discloses that tactile, visual and audible warnings are generated when it is determined that the driver is drowsy (col. 5, lines 23 to 39) to alert the driver of drowsiness and thereby increase the awareness of the driver. The drowsiness determination is made by comparing the detected heartbeat rate of the driver with a reference value (col. 2, lines 30 to 35).

Saitoh discloses that once it is determined that a driver is drowsy, several methods can be used to improve the awareness of the driver including raising the volume on the CD player, generating an audible warning, supplying perfume to the automobile compartment, and decreasing the temperature in the automobile compartment. The reduction of the temperature is done using an air conditioner which blows air in the direction of the driver (col. 9, lines 30 to 50).

Both Kawakami (col. 2, lines 30 to 35) and Saitoh (col. 1, lines 17 to 20; col. 4, lines 54 to 57) determine the level of drowsiness of the driver, based on a detected heartbeat rate and take steps to increase the level of awareness of the driver. In our view, it would have been obvious to lower the temperature in the Kawakami driver compartment as taught by Saitoh in response to the determination that the driver is drowsy. In addition, as Saitoh discloses monitoring the level of drowsiness of the driver and lowering the temperature in the vehicle cab in response to an increase of drowsiness, Saitoh alone discloses the invention recited in claim 19.

Even if appellants are correct that the warnings used in Kawakami are warnings that can be terminated by the driver and that therefore the driver would not be alerted to his sleepiness were the teachings of Kawakami and Saitoh were combined, in our view it would still have been obvious to utilize the temperature lowering step taught by Saitoh to provide an additional means of increasing the level of awareness of the driver. In any case, as Saitoh teaches that the temperature in the driver cab is reduced by blowing cool air in the direction of the driver, this too may be considered a terminable warning that requires the action of the driver to adjust the air conditioner so that cool air is not flowing in his/her direction.

In view of the foregoing, we will sustain this rejection as it is directed to claim 19. We will also sustain this rejection as it is directed to claims 20 and 21 because the appellant has not advanced arguments with regard to these claims which is different

from the argument made for claim 19. Accordingly, we have determined that these claims must be treated as falling with claim 21. See In re Nielson, 816 F.2d 1567, 1572, 2 USPQ2d 1525, 1528 (Fed. Cir. 1987).

We turn next to the examiner's rejection of claims 22 to 24 under 35 U.S.C. § 103 as being unpatentable over Kawakami in view of Brownlee.

Kawakami does not disclose the step of pumping oxygen into a vehicle cab in response to an increase in the level of drowsiness as is recited in claim 24. The examiner relies on Brownlee (col. 1, lines 40 to 46) for the teaching the step of pumping oxygen into the vehicle cab to increase the awareness of the driver.

As Kawakami seeks to increase the awareness of the driver by various methods and Brownlee teaches that one way of increasing the awareness of the driver is to pump oxygen into the vehicle cab, it is our view that it would have been obvious to a person of ordinary skill in the art to pump oxygen into the vehicle cab when it is determined that the driver is drowsy. Therefore, we will sustain this rejection as it is directed to claim 22. We will also sustain this rejection as it is directed to claim 24 as claim 24 stands or falls with claim 22 (brief at page 3).

Appellant argues that were the teachings of Kawakami and Brownlee combined, the oxygen would not be pumped into the vehicle cab in response to the determination of drowsiness but in response to the determination that the oxygen in the vehicle cab had reached a certain level. We do not agree. Kawakami discloses that when it is

determined that the driver is drowsy, certain steps are taken to increase the awareness of the driver and Brownlee discloses that increasing the oxygen level in the vehicle cab increases the awareness of the driver (col. 1, lines 39 to 44). Therefore, it would have been obvious to pump oxygen into the Kawakami vehicle cab when it was determined that the driver is drowsy.

In regard to claim 23, we agree with the appellant that there is no teaching or suggestion for utilizing a climate control system to pump oxygen into the vehicle cab. The system 20 of Brownlee identified by the examiner as a climate control system is a system to monitor and control the oxygen level in the vehicle cab not a system to control the climate in the vehicle cab (col. 2, lines 40 to 50). Therefore, we will not sustain the rejection of claim 23.

In summary, the examiner's rejection under 35 U.S.C. § 103 of claims 19 to 22 and 24 is affirmed. The examiner's rejection under 35 U.S.C. § 103 of claim 24 is reversed.

#### CONCLUSION

No time period for taking any subsequent action in connection with this appeal  
may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

LAWRENCE J. STAAB  
Administrative Patent Judge

MURRIEL E. CRAWFORD  
Administrative Patent Judge

LANCE LEONARD BARRY  
Administrative Patent Judge

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